

through the pedicle and what other tissues had not been constricted, I directed an assistant to apply, above the pedicle, the rubber tubing of Esmarch's bandage, so as to arrest the circulation through the branches of the axillary artery, distributed to this part of the body, as having found it most serviceable, upon a previous occasion, in extirpating a large fibro-cystic tumour of the mamma.

After the operation the smaller tumours were carefully counted, by dividing the surface of the body and extremities into sections, and they numbered sixteen hundred. A part of the large tumour, and a part of a smaller one which was snipped off with scissors, were submitted to George W. Rains, Professor of Chemistry in the Medical College of Georgia, for microscopical examination. He reports both specimens as composed of a mass of nucleated cells and fibrous tissue, with nucleoli measuring $\frac{1}{1000}$ of an inch, and nuclei $\frac{1}{4000}$ of an inch in diameter.

The photographer, by mistake, failed to strip the patient of all clothing, and thereby failed to represent the tumours on the inferior extremities, and especially a large one upon the outer side of the right thigh, which is not pedicellated, and involves a considerable extent of skin and subjacent tissues.

I respectfully refer the readers of this Journal to Dr. Edward Wiggleworth's article upon Fibromata, in the *Archives of Dermatology*, April, 1876, for more full information of the pathology and history of these remarkable growths.

AUGUSTA, GA., May 1, 1876.

ART. XVI.—*An unusual case of Cancer of Breast, with Tissue Infiltration and Cachexia; Child-birth and Post-partum Hemorrhage; Retrogression of Disease and apparent Restoration to Health for more than two years; Excision of Mamma owing to Renewal of Disease; Subsequent Appearance of Cancerous Nodules in the Skin; Death after two more years of slow decline, accompanied by some symptoms pointing to Intracranial Disease; Autopsy; Remarks.* By JAMES S. GREENE, M.D. Harv., of Boston (Dorchester), Mass.

THE patient whose case is here recorded first came under my observation in the summer of 1870. She was then forty-five years of age, married, and the mother of five healthy children. All her brothers and sisters, four in number, were living and well; as likewise her mother. Her father died of acute pulmonary trouble at the age of seventy-six. All the ancestors, as far back as to include the great-grandparents, lived to advanced age, and showed no taint of cancer or other hereditary disease; and the only instances of cancer known in collateral branches are a mother's cousin, upwards of seventy, and a maternal cousin still further removed, dying at eighty, both of reputed scirrhus.

This lady was above the middle stature of her sex, of good figure and erect carriage, having a fair complexion and light-brown hair. Born in Massachusetts, her life had been passed in her native State, excepting

some later years in California, where she had intermittent fever. Her health otherwise had been excellent. She was prevented from nursing her eldest child by the occurrence of inflammatory trouble of the left breast; with her other children lactation was normal.

About the end of April, 1870, she became pregnant with her sixth child. In June she revealed the fact, concealed for some unknown length of time, that she had a disease of the left breast.

Having arrived at Boston from California, July 5th, she consulted Dr. Henry J. Bigelow, who now distinctly remembers and describes her disease as "a thorough-going cancer of the breast, in active progress and highly vascular."

He advised non-interference, except with means for relief of pain, until after recovery from the expected confinement, and his advice was followed.

February 4, 1871, after a labour of two hours' duration, she gave birth to a healthy female child weighing ten and a half pounds. Flooding *ad deliquium* followed, though the uterus was prevented from relaxation by a firm grasp over the fundus, maintained from the moment of the expulsion of the child until the danger was past. The pulse was almost, and part of the time quite, imperceptible for two hours and more; but, by prompt and diligent efforts, restoration was finally secured.

There was no attempt at lacteal secretion in the diseased breast. Strength returned very slowly, and it was not until the latter part of May that she a second time visited Dr. Bigelow, and renewed the question of surgical interference. He found the tissues near the breast so implicated in the disease that he again, and finally, advised against an operation.

Her condition at the end of May was as follows: Dull eyes, a haggard countenance, paleness and sallowness of complexion, and weakness were marked symptoms, chargeable in part to the progress of organic disease, in part to anæmia resulting from the post-partum hemorrhage; while the vascularity of the local disease had probably lessened since child-birth. The left breast was hard and firmly adherent to the pectoral muscle, and was crossed by a horizontal furrow, into which the nipple was deeply drawn. This sulcus was filled with a scab, moistened by a slight, excoriating discharge, and the surrounding skin was bright-red for the space of a few lines. The left clavicle had a central point of extreme tenderness to touch, and above and below it the tissues were tense, indurated, and painful. There was also some thickening of the tissues near the right clavicle. Some glands in the left axilla were enlarged and tender; left hand was puffy and somewhat livid. Movement of the arm greatly restricted and painful; not more than three or four inches space between elbow and side could be tolerated in adduction, and rotation was almost wholly prevented.

Just at this time cundurango bark was first advertised to possess specific virtues against cancer.

The patient went to Washington, where she remained about six weeks, taking the bark under the direction of Dr. Bliss. The supply, scanty from the beginning, and doled out in the most frugal manner, then became exhausted; and, July 10th, with a certain improvement in condition, she returned to Massachusetts, there to await a new invoice of the alleged cancer specific. This was received, and its use resumed about the end of the same month. She then used, in addition to a decoction of ʒij of the bark daily, a tincture made by percolation of the residue with alcohol.

August 8, ten days after she resumed the use of the drug, an opportunity was granted me to examine the breast. Its redness had disappeared, so had some of its former hardness; it was movable on the underlying muscles. Manipulation did not elicit pain nor tenderness. The horizontal sulcus which included the nipple appeared to be less tightly drawn. That portion of the scab which had filled the inner half of it, having become loosened, had been removed by the nurse and had not been reformed. There appeared to be a letting out of a margin of skin which had been drawn into the furrow. There was a spot on the left clavicle still a little tender to pressure; and the infiltration of the adjacent tissues, though less marked than before, was noticeable. There were no longer any tender or enlarged glands in the axilla. The puffy, livid appearance of the left hand, remarked only a few days previously, was wholly gone, and the arm had regained considerable freedom of motion.

August 16, a further "letting out" of the skin from the sulcus in the breast had become very perceptible, and the range of movement of the arm was daily increasing. There had been a slight menstrual flow two or three times, at irregular intervals, and I think the final cessation of the catamenia took place about the last of August.

The history of the next two years of her life may be condensed into a few sentences. She rapidly reached, and maintained during most of that period, a condition of thoroughly good health; having early lost all outward signs or symptoms of disease. Complexion, eye, and movement all betokened health and strength, and in 1872 she weighed more than ever before. Coincidentally all local infiltration of tissue disappeared. The arm regained its entire mobility and freedom from lameness, if not its full strength.

The process of absorption of morbid deposits did not reach its full completion in the breast itself, for the nipple continued to be in some degree retracted. The shallow groove around it became free from any unwholesome secretion, and the gland, though harder than normal, was without tenderness.

During this period she was taking liberally of cundurango, under the direction of Dr. Bliss. Sometimes its use was suspended for awhile, but, allowing for these intervals, she probably took it in full doses at least two-thirds of the time.

In the later months of the period now under notice, while her general condition remained good, and she ate and slept well, there was nevertheless a perceptible lowering from the standard of thorough good health. During some of these weeks she would be rather nervous, and would feel fretted because she had not her usual executive ability. All this time her residence was in Massachusetts, though visits of a few weeks were made both in California and at Washington.

In September, 1873, the family removed to Washington, and I did not see the patient until the following April. I learn that she began, as early as October, to be apprehensive of a renewal of the disease in the breast; but she only took her medicine the more diligently, and said nothing. It was not until February, 1874, that her husband became aware of the recurrence of local symptoms; and Dr. Bliss, being consulted, advised, and soon afterwards performed, the operation of excision of the mamma.

The wound healed well, but the patient was still weak from the effects of the operation, when required to undergo the fatigue, anxiety, and responsibility attending the illness and death of her mother. This involved a

journey to the north early in March, a return journey with the sick woman the beginning of April, devoted attendance for rather more than two weeks longer, and a second journey to Massachusetts with the remains for interment. To this period, immediately succeeding the surgical operation, are referred the slighter beginnings of a new class of symptoms, traceable to the nerves and to the nerve centres, pointing to a stealthy, hidden influence, harassing, weakening, and finally destroying the powers of life near their source.

The increasing feebleness, which I could not fail to notice on the occasion of the above-mentioned visits, was attributed by her friends to fatigue and anxiety. It has since been said that she never seemed to recover from the shock of the surgical operation. Periods of languor, pallor, indisposition to move occurred, and increased in frequency. Rigors came at irregular intervals, suggesting the revival of former malarial influences. Pain, both of fixed and darting character, in back and limbs, became troublesome. This was called rheumatism, or sometimes neuralgia. Her husband, ever devoted and full of resource, maintained that she was overcome by the heat of Washington latitude; and, July 1st, brought her north to Massachusetts, where she remained for six or seven weeks, always bravely resisting the progress of enfeeblement.

August 18th she was taken by her husband overland to California, where, almost as soon as she arrived, she succumbed to nervous prostration. This illness proved serious and prolonged. It was called malarial fever, from the frequent occurrence of chills; there being a settled policy never to admit the possibility of a return of cancerous cachexia. Indeed, *cundurango* was held to be the restorer and preserver of her life, and was still used largely. These nervous chills were frequent and prolonged; a sip of water would often induce one. Another persistent and perplexing symptom was a quick, feeble, very irregular, and intermittent pulse. Quinia, to the extent of twenty grains daily, was used, with good effect on the pulse.

I do not learn that much fever was present, but do not suppose that any thermometric observations were made. There was *no headache*, and the patient's own mental operations were as clear and rapid as ever; but she began to require that any one who addressed or read to her should *speak slowly*. At other times she could tolerate no talking near her. In the middle of December, four months after leaving the Atlantic coast, she had rallied sufficiently to venture upon a return. The journey, made with every modern appliance for a sick person's ease, and with attentive nursing, did not cause exhaustion nor apparent strain of such of her powers as remained; but on her arrival at Washington, every attempt at resuming the least part in social or home affairs resulted in most discouraging prostration, attended by pallor and disinclination to move. Talking in her presence would then be distressful. She no longer had chills.

Through that winter, and until the succeeding summer of 1875, she remained at Washington, and this unequal, but still courageous contest continued against the lurking, concealed disease. One letter would inform us of her sitting up to receive visitors, or even driving out to Arlington Heights; the next would describe her in a state of prostration seemingly but little less than collapse.

She came to Massachusetts, her last journey, the first of July, 1875. The trip seemed to exhaust the last particle of physical energy. In one or two drives that she attempted after her arrival, the pallor, the dull,

glassy eye, the expressionless countenance, gave her almost the aspect of a corpse sitting and moving; nevertheless nearly six months of existence still remained.

My attention was called to the presence, on the integument of the head and back, in the flexure of the thigh, and in the line of the cicatrix on the breast, of several painless nodules, probably twenty or more in number. In shape and size they were like fully-developed vaccine vesicles, umbilicated, without areolæ, and, in colour, like the surrounding skin. They had begun to appear several months previously, and did not increase in number nor change in appearance during the remainder of life; but some of them, pressed upon as she lay, finally became very painful. At one or two points along the scar on the breast there was a slight scarlet blush, and this also henceforward remained stationary. Not only the cicatrix, but the whole surrounding skin over the space formerly covered by the mamma, was firmly fixed to the chest walls; and this region was the seat of a good deal of pain. Soon, however, pain of a much severer and more persistent character attacked the right side, beneath the lower ribs; and when this ceased, after about a month, there remained lasting numbness of the same parts. About the same period there occurred hyperæsthesia of the skin and mucous membrane of the cheek and lips on the left side, and of the surface of the chin; and this becoming persistent, though unattended by any marked appearance of motor paralysis, nevertheless prevented mastication, and limited the patient during the remainder of life to liquid diet. There was also incipient palsy of the left upper eyelid; and by the middle of August this had slowly developed into complete ptosis, with divergent strabismus of the same side, and she spoke of seeing objects double. During this time her rapidly failing strength compelled the relinquishment of all effort. She ceased to ride, to sit up, to recline in a hammock. The slightest muscular effort was usually attended by pain somewhere, and followed by exhaustion. Remaining almost motionless in bed, sounds, even the slightest, became intolerable. All noises, even to the rustle of a dress, were abolished in the house. Nevertheless, in her quieter moments, she read with her one useful eye, and wrote cheerful letters to her husband, then unavoidably in California, concealing from him all unfavourable tendencies and symptoms. These became so threatening, however, that, in the middle of August, I sent a telegraphic message advising his immediate return. She, ignorant of this, sent the same day a brave letter, while the effort of writing cost her some days of great pain in the back, shoulders, and neck, keeping her for the time almost motionless. The pulse at this period was once more irregular, intermittent, and weak. A little later, under the use of quinia, it regained considerable steadiness. The distressing hypersensitiveness of hearing gradually ceased during September; and, about two months before death, it was accidentally discovered that there was deafness of the right ear.

Among the symptoms always noticeably absent were irritable stomach and headache. During the last weeks there were times when her head "felt dreadfully"—she could not describe it, but it must be bathed or stroked or combed very carefully, avoiding the nodules, and she must not be troubled with words. She partook liberally of a variety of liquid nourishment until the last hours of life, but during the last few days the sense of taste was manifestly lost. She usually had considerable sleep at night, and some by day. Decubitus was wholly on the back; she could move her limbs, but had no power over the trunk. Passive motion of the

upper part of the body was very distressing, and for days together the slightest attempt at changing its position inflicted torture. Constipation, and the occasional resulting necessity of relieving the rectum of its accumulated contents, became a source of serious suffering and exhaustion.

The tendency to remission and exacerbation was traceable throughout, so that while the tide of disease constantly encroached upon the powers of life, it did so by successive wave-like advances and recessions. Thus, as in Washington months before, brief intervals of activity came between periods of prostration, so, now, days of comparative comfort intervened to relieve the distressful soreness of body. At times her tongue, commonly deep red and covered with a thick white coat, gradually became, and for a short time remained, clean and normal in colour. Towards the close, short times of such exhaustion came that life often seemed nearly pushed from its foothold in the body; then rallied and made a feeble stand.

I do not attribute this trait to malarial influence, for I do not know that it was more noticeable than in many cases of prolonged disease where the circumstances exclude suspicion of such agency. Indeed, this tendency to periodicity, seen everywhere throughout nature, was, perhaps, especially conspicuous here owing to the level steadiness and undeviating onward progress of the current of disease, permitting a view of each undulation in its course.

In the last days of life the power of articulate speech had become so far withdrawn, partly through weakness, partly from actual palsy, that she uttered only a few words very indistinctly.

Death came the 16th of December, 1875, from no other apparent proximate cause than asthenia. The power of voluntary motion gone, slowly the vagus nerve seemed to yield its function. The conscious mind probably maintained its seat almost to the end.

It will be seen from the foregoing record that the duration of her disease, allowing for the probable time when she was withholding the knowledge of it, was not much less than six years.

More than four and a half years of life remained after the opinion was given by the highest surgical authority that the disease had already too far contaminated her system to warrant an attempt at relief by the knife.

Following this expression of opinion, began rapid retrogression of the disease and recovery of health, fairly maintained for nearly two years and a half. Then came local relapse, culminating in excision of the mamma and complete removal of all external evidence of disease; and finally, thereafter, something less than two years of slow decay preceding the fatal issue. Her age at death was fifty years and nine months.

The day following death I availed myself of permission gained to make a preliminary examination of the contents of the thorax and abdomen.

On the whole left front of the thorax the skin was tightly adherent to the ribs and intercostal muscles. The left lung was free from disease, but contained no air, being compressed by a collection of from two to three pints of clear serum. From the base of the lung extended a narrow, very strong fibrous band to the costal pleura. The right pleural cavity contained a half pint of serum. The spleen was somewhat enlarged. All the other parts appeared healthy.

Five days later, leave was granted to examine the brain; and an autopsy was carefully performed by Dr. R. H. Fritz, Pathologist of the Massachusetts General Hospital, who has kindly furnished me with his minutes, as follows:—

"*Autopsy.*—Six days after death. Body exceedingly well preserved, much emaciated. A cicatrix, resulting from the removal of the left breast, in the vicinity of which, as well as elsewhere in the skin of the thorax, abdomen, and head, were several dense, flattened, rounded, somewhat elevated cancerous nodules, often umbilicated.

"The pericranium was infiltrated with the new formation as dense, gray slightly translucent patches. Calvaria thick and heavy from condensation of the diploetic portion. Dura mater unusually adherent; its periosteal surface presented diffused, slightly elevated patches of new formation. The inner surface of the dura, especially on the right side, in the frontal and parietal regions, studded with dense, gray nodules and patches, in parts confluent, the largest three-fourths of an inch in diameter and one-fourth of an inch in thickness, to many of which the pia mater was intimately adherent. Between and sometimes upon these growths the dura presented a delicate, thin, vascularized false membrane, containing numerous small points of hemorrhage. The vessels of the pia mater, injected; over the pons Varolii, anteriorly, slightly thickened and opaque. The brain in general apparently normal; the ventricles not dilated.

"The third pair of cranial nerves on the left, just before passing under the clinoid process, became suddenly of nearly twice the ordinary thickness, gray, dense, homogeneous, thus extending along the wall of the cavernous sinus.

"A nodule of new formation, as large as a pea, was found in intimate relation with the fifth nerve as it entered the right Gasserian ganglion. The motor root of this nerve was outspread upon the nodule. The thoracic organs presented no evidence of disease; the pleural surfaces apparently healthy. Spleen moderately enlarged, dark, and firm. Nothing abnormal found in the abdominal cavity.

"The structure of the nodules in the dura mater and skin was composed of a dense, fibrous stroma inclosing alveolar spaces, round, oval, and elongated, in which were groups of large, irregularly polygonal cells, but little degenerated and with large nuclei. There was no evident intercellular substance. Their arrangement at times was that of anastomosing bands.

"*Diagnosis.*—Cancerous meningitis and neuritis, with hemorrhagic pachymeningitis.

"With regard to symptoms, the examination explains only in part. The affection of the muscles of the left eye is apparent. The alterations united with the right fifth should be rather neuralgic, motor of the masticatory muscles, with possibly some affection of taste through the lingual nerve.

"The hemorrhagic inflammation of the dura—the *pachymeningitis interna* of Virchow—might explain a good many mental peculiarities, to say nothing of subjective and objective phenomena. The left-sided facial paralysis below the eye was not explained anatomically."

Among the many points of interest in the foregoing history, the signal retrogression of the far-advanced disease is especially prominent and noteworthy.

Velpeau emphatically denies the possibility of such an occurrence.

"Une fois né, on ne voit point le cancer rétrograder absolument; si la tumeur diminue parfois sur un point, c'est qu'il s'en forme ailleurs ou que l'économie s'infecte. Il n'y a pas plus lieu d'espérer la disparition spontanée d'un cancer quand il est petit, du volume d'une tête d'épingle par exemple, qu'à partir du moment où il égale le volume du poing ou de la tête." (*Traité des Maladies du Sein*, Paris, 1858, p. 513.)

He admits, in scirrhus, one seeming exception, namely, the atrophic variety, so called; but avers, in opposition to Virchow, that even this form is as steadily progressive in its way as any other.

This atrophic scirrhus, however, has no analogue nor illustration in the case I have detailed, which, as we have seen, is an instance of retrogression

not merely of the tumour, but of all visible signs and symptoms of disease, both in the tissues surrounding the tumour and in the general economy; and, as such, remains among recorded cases a very rare, and, perhaps, entirely unique one.

Is it possible satisfactorily to account for the phenomenon of retrogression as here displayed?

Dr. Bigelow emphasizes the consideration that the juiciest period of the disease was coincident with pregnancy, when the mamma was in its highest state of functional activity; and his comment, I suppose, would be that the most favourable time for a pause in the progress of malignant disease is when local physiological activity has just ended. It is even further not unlikely that a physiological retrogression of the functionally enlarged breast might be associated with the retrogression of a neoplasm in such breast.

Secondly, it is possible that not only the physiological crisis, but the appalling puerperal accident attending it, proved ultimately an advantage. If the patient had constitutional power enough to rally with any vigour from such a shock and loss of vital fluid, the repair would naturally be less obstructed, and the healthful efforts would gain better ascendancy after the veins had been drained of the mass of blood which must, at that stage and condition of the disease, have been loaded with morbid material.

Next, these physiological conditions were reinforced by psychological ones of no little power. This patient had a vigorous constitution and a strong will. She had also a susceptible mind and an impressible nervous organization. One possessing such a temperament would droop rapidly when faced by the horrible spectre of *cancer*, and assured that hope must be left behind; and under such circumstances the disease would advance with redoubled swiftness; but aided by the same temperament, the forces of life would grandly reassert their influence, if hope were substituted for despair by the assurance of rescue by means of an unlooked-for, and, until then, unknown antidote.

Cundurango bark was just then introduced through the channel of the State Department at Washington, and extraordinary specific powers against malignant disease were claimed for it. The husband of my patient, standing near this official source of the meagre information then received concerning the alleged remedy, willingly convinced himself that here was the destined agent of her cure. I think it is literally true, and not a mere figure of speech, that her failing powers were first re-energized from the ample resources of his overflowing, sanguine vitality, lavished on her with the deliberate purpose to admit no doubt nor questioning. The returning health current, when thus set in motion, was strengthened and steadied by the power of her own will, the natural vigour of her constitution, and every aid that change of air and mental diversion could furnish; while it was kept free from contamination by the depuration of

her blood through depletion, and by the cessation of functional activity in the tissue which was the local fountain-head of the disease.

All these conditions and agencies, namely, the physiological crisis, the hemorrhage, the quality of the patient, the incidents and accidents of her station, are, without doubt, when combined, sufficiently powerful to account for a prolonged check in the downward career. But can they, exceptionally potent as they are, be accepted as adequate explanation of retrogression of the advanced local disease? Or must this, for the present, remain one of the unexplained, as well as exceptional, facts in the natural history of cancer?

I cannot answer. But the tissue infiltration, the enlarged and tender axillary glands, and the subsequent resolution of these morbid deposits were, and as a matter of record still remain, stubborn facts.

What of cundurango? it will be asked.

There is, I suppose, a qualified sense in which the idea of specific remedies is still admissible in scientific discussion. In no sense has cundurango, during the ample time which has elapsed since its introduction, established a title to be regarded as a cancer specific, whether by published results of its use or by chemical analysis of its components. In default of supporting evidence, I do not think the facts of this history, fairly interpreted, justify such claim.

I neither affirm nor deny its possession of medicinal properties suited to the general needs of persons debilitated like this patient; but the discussion of such alleged virtues is foreign to the purpose of this paper; and I am, therefore, unable to say more than that its public announcement came at a fortunate time for the patient by setting in motion potent agencies in her behalf.

In closing it will be well to recall the principal features which make the case memorable:—

1. The exceptionally clear family record.
2. The employment of a supposed specific which, as such, could neither earlier nor later than that very time have commanded the unswerving confidence of the patient and her friends; not earlier, because until then unknown—nor later, because since generally discredited after ample trial.
3. The retrogression of disease coincident with the employment of the alleged remedy.
4. The subtle manner in which the disease made its second advance and final triumph, wearing the garb of other affections—anæmia, neuralgia, neurasthenia, rheumatism, intermittent fever, I had almost said hysteria.
5. The wonderful hold upon life displayed both as a physical and mental trait, and the pre-eminent fortitude and bravery of the patient, surpassing any that I ever witnessed.
6. The almost total absence of the usual symptoms of meningeal

trouble, while the dura was so extensively metamorphosed by cancerous disease.

7. The entire non-implication of the mental faculties throughout.

8. The thoracic and abdominal pains, the intolerance of movement, the left facial palsy, and the hypersensitiveness of hearing, followed by deafness—all probably of centric origin, but not directly explained by the autopsy.

9. The explanation of the ptosis on the left side, by the discovery of the cancerous enlargement in the course of the third nerve, and *per contra*, the absence of symptoms, either motor or sensitive, during life, dependent on the similar but greater tumour found in the fifth nerve on the right side.

10. The unsuspected and unexplained hydrothorax.

11. Finally, the peripheral character of the disease from beginning to end, neither the brain nor any thoracic, abdominal, or pelvic organs or tissues being implicated in any recognizable degree.

DORCHESTER, May 1, 1876.

ART. XVII.—Stricture of "The Œsophagus," from the Action of Caustic Potash; Œsophagotomy; Death; Post-mortem. By CHAS. W. HORSEY, M.D., of Fernandina, Florida.

I WAS called hurriedly May 2, 1874, to see Eddie de F——, about five years of age, and informed that he had just swallowed some *concentrated lye*, which had been mixed for scouring and carelessly left within reach of the child, who had taken a mouthful, mistaking it for milk, which he was in the habit of drinking from the same cup. The mucous membrane of the entire buccal cavity, surface of the tongue, fauces, and pharynx, as far down as I could see, was raw, bleeding, and already greatly swollen, with portions of the caustic fluid still covering the parts.

The posterior nares, and to some extent the anterior portion of the nostrils also, were affected, indicating that the caustic had excited violent reflex action, and forcible ejection of a part of it through the upper air passages.

His breathing, though somewhat hurried, was not otherwise affected, and after careful examination, I was satisfied that none of the caustic had entered the larynx. I immediately proceeded to neutralize the poison with *strong vinegar*, which happened to be at hand, and succeeded in getting enough down him to satisfy myself that if any had entered the stomach, it was thoroughly decomposed.

Pure *olive oil* was then given to soothe the intolerable pain and burning, and the following mixture prescribed as an application to the affected parts. R. Potass. chloratis, ʒijss; acid. carbolicæ, fʒj; glycerinæ, fʒij; aquæ ad ʒviij. To reach the surfaces lower down, I directed a teaspoonful of the mixture to be given internally every two hours, and ordered the